ABSTRACT OF THE DISCLOSURE

Disclosed is an in-line mode network intrusion detecting and preventing system coupled between a protection network and an external network, for detecting intrusion states between the networks and preventing the intrusion. The system comprises a first network processor unit for monitoring the packets communicated between the networks to collect various statistical data, and performing a packet filtering process according to a packet preventing rule and a packet sensing process according to a sensing rule; and a second network processor unit for checking payloads of the packets with reference to attack signatures to detect the attack states to one of the networks.